

storm on Pike's Peak, from which station thunder-storms are reported as having occurred almost daily. Thunder or lightning, or both, were more frequent in the Southern and Western States, especially the latter, than in other sections.

Auroras were observed in the most northern States; that of the 14th at places in Vermont, New York, Michigan and Wisconsin as an auroral arch.

OPTICAL PHENOMENA.

Solar Halos.—Those reported most frequently are as follows: on the 4th, in Illinois; 6th and 7th, in Georgia and Maine; 9th, in New York and Ohio; 17th and 18th, in Georgia and Massachusetts; 19th and 20th, in Alabama, Georgia, Pennsylvania, New Hampshire, Massachusetts and Maine; 22d, in Maine and New Hampshire; 23d, in Kansas, Nebraska and New Hampshire; 25th, in Massachusetts, New Hampshire, New York and Michigan; 26th, in Iowa, Illinois, Wisconsin, Ohio, Pennsylvania and Newfoundland; 28th, in Maine and Massachusetts; 29th, in Maine, New York, Pennsylvania and Michigan.

Lunar Halos were seen at more than one station in Maine, New York, Indiana and Iowa on the 25th; in Georgia, Ohio and Indiana on the 26th; in Georgia, South Carolina and Pennsylvania on the 27th.

MISCELLANEOUS.

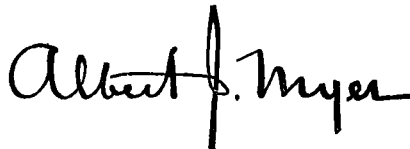
Meteors have been reported as seen in large numbers during the first half of the month, and principally in the Northern States. The dates upon which they were most frequent are the 1st, 2d, 3d, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th and 13th, particularly the 10th, in Florida, Texas, Missouri, Wisconsin, Iowa, Michigan, Illinois, Indiana, Virginias, Pennsylvania, New York, New Jersey and Maine.

Earthquakes were felt at Clifton, San Bernadino county, California, during the evening of the 3d, light shock from the east; at the following points in the West Indies about noon of the 8th, but without any damage, St. Kitts, very heavy shock, Antigua, sharp shock, and St. Thomas, smart shock with a long rumbling before and after; at El Monte, Los Angeles county, California, on the 20th, rumblings of distant earthquake heard, on the 24th, mutterings in the ground during the morning, on the 25th, mutterings at intervals during the morning.

The water in Lake Champlain, at West Charlotte, Vermont, has been two feet above the August average.

At Marquette, Michigan, out of ninety-three observations made upon the rise and fall of the surface of the water in the Lake, it acted with the barometer forty-one times and contrary to it fifty-two times.

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